

affinity of these two districts has been ascertained for a long time; and it would become still more apparent if regard had been had not only to species (some of which have a very wide range) but also to genera—and, secondly, if the marine fauna of Western North America had been drawn within your present researches.

Of course you are aware that a large proportion of the terrestrial animals of Northern Japan are European types.

I remain, yours very truly

A. GÜNTHER.

J. Gwyn Jeffreys, Esq., F.R.S.

Note on a New Species of Japanese Brachiopoda. By THOMAS DAVIDSON. Communicated by J. GWYN JEFFREYS, Esq., LL.D., F.R.S., F.L.S.

[Read January 15, 1874.]

IN the Proceedings of the Zoological Society of London for April 1871, I described and illustrated all the species of Brachiopoda (twenty in number) that had been procured from the Japanese waters.

Since then Dr. C. E. Lischke obtained from the Bay of Jedo several examples of a coppery-coloured and green *Lingula*, approaching in size and character to *Lingula smaragdina*, Adams, a species common to the China sea, and which will before long be described in that naturalist's work 'Japoniacks Musei Conchilica.'

In 1872 Captain St. John, of Her Majesty's Ship 'Sylvia,' dredged five or six species of Brachiopoda in North Japan, namely:—*Terebratella Coreanica*, Adams & Reeves, 48 fathoms; *T. frontalis*, Middendorff, 35 fathoms; *Laqueus rubella*, Sow., 35 fathoms; *Waldheimia Grayii*, Dav., and its var. *transversa*, 35 fathoms; *Rhynchonella psittacea*, Gmelin, 35 fathoms.

We are therefore indebted to Captain St. John for the knowledge of one additional species in the Japanese waters, viz. *Terebratella frontalis*, Middendorff; and it is interesting to add that during the year 1873 Mr. Dall has dredged several living specimens and many dead ones of his rare species at Atka Island, of the Aleutian Chain, but originally described from the Ochotsk Sea. He informs me also by letter that its range in the island

is from Attu, at the western side of the chain, to Atka, and that, so far as he has been able to discover, it does not extend further east.

Observations on Bees and Wasps. By Sir JOHN LUBBOCK, Bart., F.R.S., M.P., F.L.S., Vice-Chancellor of the University of London.

[Read March 19, 1874.]

THE Social Hymenoptera, according to Messrs. Kirby and Spence*, “have the means of communicating to each other information of various occurrences, and use a kind of language which is mutually understood and is not confined merely to giving intelligence of the approach or absence of danger; it is also co-extensive with all their other occasions for communicating their ideas to each other.”

Huber assures us as regards Ants † that he has “frequently seen the antennæ used on the field of battle to intimate approaching danger, and to ascertain their own party when mingled with the enemy; they are also employed in the interior of the ant-hill to warn their companions of the presence of the sun, so favourable to the development of the larvæ, in their excursions and emigrating to indicate their route, in their recruitings to determine the time of departure,” &c. Elsewhere also he says ‡ “that should an Ant fall in with any of her associates from the nest they put her in the right way by the contact of their antennæ.”

These statements are most interesting; and it is much to be regretted that he has not given us in detail the evidence on which they rest. In another passage, indeed, he himself says § “if they have a language, I cannot give too many proofs of it.” Unfortunately, however, the chapter which he devotes to this important subject is very short, and occupied with general statements rather than with the accounts of the particular experiments and observations on which those statements rest. Nor is there any serious attempt to ascertain the nature, character, and capabilities of this antennal language. Even if by motions of these organs Bees can caress, can express love, fear, anger, &c., it does not follow that they can narrate facts or describe localities.

* Introduction to Entomology, ii. p. 50.

† *L. c.* p. 206.

‡ *L. c.* p. 157.

§ *L. c.* p. 205.